

09/976,601

=> d his

(FILE 'HOME' ENTERED AT 14:37:01 ON 23 SEP 2004)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:40:32 ON
23 SEP 2004

L1 1300 S (NANOPARTICLE? OR NANO? OR NANOSPHERE?) (3A) OLIGONUCLEOTIDE?
L2 596 S L1 AND AQUEOUS SOLUTION?
L3 546 S L2 AND SALT
L4 48 S L3 AND BIND? (15A) SALT? (20A) OLIGONUCLEOTIDE? (20A) (NANOPA
L5 44 DUP REM L4 (4 DUPLICATES REMOVED)
L6 0 S L5 AND PY<=1996
L7 0 S L5
L8 0 S L5 AND PY<=1997

=> d l5 bib 1-44

L5 ANSWER 1 OF 44 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 1
AN 2004-213934 [20] WPIDS
CR 2003-328477 [31]; 2004-031299 [03]
DNC C2004-084699

TI Metallic core/shell nanoparticles, useful as carriers for oligonucleotide
probes used in hybridization assays.

DC B04 D16

IN CAO, Y; JIN, R; MIRKIN, C A

PA (NOUN) UNIV NORTHWESTERN

CYC 1

PI US 2004038255 A1 20040226 (200420)* 1

ADT US 2004038255 A1 Provisional US 2001-293861P 20010525, Div ex US
2001-34451 20011228, US 2003-397579 20030326

PRAI US 2001-293861P 20010525; US 2001-34451 20011228;
US 2003-397579 20030326

L5 ANSWER 2 OF 44 USPATFULL on STN

AN 2004:144556 USPATFULL

TI Nanoparticles having oligonucleotides attached thereto and uses therefor

IN Mirkin, Chad A., Wilmette, IL, UNITED STATES

Letsinger, Robert L., Wilmette, IL, UNITED STATES

Mucic, Robert C., Glendale, CA, UNITED STATES

Storhoff, James J., Evanston, IL, UNITED STATES

Elghanian, Robert, Skokie, IL, UNITED STATES

Taton, Thomas A., Little Canada, MN, UNITED STATES

Garimella, Viswanadham, Evanston, IL, UNITED STATES

Li, Zhi, Evanston, IL, UNITED STATES

PA Nanosphere, Inc. (U.S. corporation)

PI US 2004110220 A1 20040610

AI US 2003-716829 A1 20031118 (10)

RLI Division of Ser. No. US 2001-760500, filed on 12 Jan 2001, PENDING
Continuation-in-part of Ser. No. US 2000-603830, filed on 26 Jun 2000,
GRANTED, Pat. No. US 6506564 Continuation-in-part of Ser. No. US
1999-344667, filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944
Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999,
ABANDONED Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21
Jul 1997, PENDING

PRAI US 2000-176409P 20000113 (60)

US 2000-213906P 20000626 (60)

US 2000-200161P 20000426 (60)

US 1996-31809P 19960729 (60)

DT Utility

FS APPLICATION

LREP MCDONNELL BOEHNNEN HULBERT & BERGHOFF LLP, 300 S. WACKER DRIVE, 32ND
FLOOR, CHICAGO, IL, 60606

CLMN Number of Claims: 485

ECL Exemplary Claim: 1
DRWN 52 Drawing Page(s)
LN.CNT 8748
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 44 USPATFULL on STN
AN 2004:94779 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Bloomington, IN, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
Garimella, Viswanadham, Evanston, IL, UNITED STATES
Li, Zhi, Evanston, IL, UNITED STATES
Park, So-Jung, Austin, TX, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2004072231 A1 20040415
AI US 2003-640618 A1 20030813 (10)
RLI Division of Ser. No. US 2001-820279, filed on 28 Mar 2001, PENDING
Continuation-in-part of Ser. No. US 2001-760500, filed on 12 Jan 2001,
PENDING Continuation-in-part of Ser. No. US 2000-603830, filed on 26 Jun
2000, GRANTED, Pat. No. US 6506564 Continuation-in-part of Ser. No. US
1999-344667, filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944
Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999,
ABANDONED Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21
Jul 1997, PENDING
PRAI US 2000-255235P 20001211 (60)
US 2000-254392P 20001208 (60)
US 2000-192699P 20000328 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 570
ECL Exemplary Claim: 1
DRWN 63 Drawing Page(s)
LN.CNT 11118
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 44 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 2
AN 2004-031299 [03] WPIDS
CR 2003-328477 [31]; 2004-213934 [20]
DNN N2004-024654 DNC C2004-010368
TI Core/shell nanoparticle for detecting target molecules, e.g. nucleic
acids, comprises inner metal-containing nanoparticle core, outer
non-alloying gold shell, and oligonucleotides attached to gold shell.
DC B04 D16 L03 P53 V02
IN CAO, Y; JIN, R; MIRKIN, C A
PA (CAOY-I) CAO Y; (JINR-I) JIN R; (MIRK-I) MIRKIN C A
CYC 1
PI US 2003129608 A1 20030710 (200403)* 21
ADT US 2003129608 A1 Provisional US 2001-293861P 20010525, CIP of US
2001-34451 20011228, US 2002-153483 20020522
PRAI WO 2001-US50825 20011228

L5 ANSWER 5 OF 44 USPATFULL on STN
AN 2003:294281 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Park, So-Jung, Austin, TX, UNITED STATES
Taton, Thomas Andrew, Little Canada, MN, UNITED STATES
Mirkin, Chad A., Wilmette, IL, UNITED STATES
PI US 2003207296 A1 20031106

AI US 2002-266983 A1 20021008 (10)
RLI Continuation-in-part of Ser. No. US 2001-8978, filed on 7 Dec 2001,
PENDING Continuation-in-part of Ser. No. US 2001-927777, filed on 10 Aug
2001, PENDING Continuation-in-part of Ser. No. US 2001-820279, filed on
28 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-760500,
filed on 12 Jan 2001, PENDING Continuation-in-part of Ser. No. US
2000-603830, filed on 26 Jun 2000, GRANTED, Pat. No. US 6506564
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, PENDING

PRAI US 2001-327864P 20011009 (60)
US 2000-254418P 20001208 (60)
US 2000-255236P 20001211 (60)
US 2001-282640P 20010409 (60)
US 2000-224631P 20000811 (60)
US 2000-192699P 20000328 (60)
US 2000-254392P 20001208 (60)
US 2000-255235P 20001211 (60)
US 2000-176409P 20000113 (60)
US 2000-213906P 20000626 (60)
US 2000-200161P 20000426 (60)
US 1996-31809P 19960729 (60)

DT Utility

FS APPLICATION

LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
3200, CHICAGO, IL, 60606

CLMN Number of Claims: 677

ECL Exemplary Claim: 1

DRWN 75 Drawing Page(s)

LN.CNT 12981

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 44 USPATFULL on STN

AN 2003:257732 USPATFULL

TI Nanoparticles having oligonucleotides attached thereto and uses therefor

IN Mirkin, Chad A., Wilmette, IL, UNITED STATES

Letsinger, Robert L., Bloomington, IN, UNITED STATES

Mucic, Robert C., Glendale, CA, UNITED STATES

Storhoff, James J., Evanston, IL, UNITED STATES

Elghanian, Robert, Skokie, IL, UNITED STATES

Taton, Thomas Andrew, Little Canada, MN, UNITED STATES

PA Nanosphere, Inc. (U.S. corporation)

PI US 2003180783 A1 20030925

AI US 2003-410324 A1 20030409 (10)

RLI Continuation of Ser. No. US 2001-961949, filed on 20 Sep 2001, GRANTED,
Pat. No. US 6582921 Continuation of Ser. No. US 2000-603830, filed on 26
Jun 2000, GRANTED, Pat. No. US 6506564 Continuation-in-part of Ser. No.
US 1999-344667, filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944
Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999,
ABANDONED Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21
Jul 1997, PENDING

PRAI US 1996-31809P 19960729 (60)

DT Utility

FS APPLICATION

LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606

CLMN Number of Claims: 431

ECL Exemplary Claim: 1

DRWN 31 Drawing Page(s)

LN.CNT 8062

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 44 USPATFULL on STN

AN 2003:237907 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003166064 A1 20030904
AI US 2002-99926 A1 20020314 (10)
RLI Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001,
PENDING Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul
2001, PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 44 USPATFULL on STN
AN 2003:213644 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2003148282 A1 20030807
AI US 2001-976968 A1 20011012 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, GRANTED,
Pat. No. US 6506564 Continuation-in-part of Ser. No. US 1999-344667,
filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944 Continuation-in-part
of Ser. No. US 1999-240755, filed on 29 Jan 1999, ABANDONED
Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997,
PENDING
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8043
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 44 USPATFULL on STN
AN 2003:207246 USPATFULL
TI Real-time monitoring of PCR amplification using nanoparticle probes
IN Storhoff, James J., Evanston, IL, UNITED STATES
Fritz, Brett, Chicago, IL, UNITED STATES
Herrmann, Mark, Clinton, UT, UNITED STATES
PI US 2003143604 A1 20030731
AI US 2002-306630 A1 20021127 (10)

PRAI US 2001-334644P 20011130 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
3200, CHICAGO, IL, 60606
CLMN Number of Claims: 91
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 2116
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 44 USPATFULL on STN
AN 2003:207180 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2003143538 A1 20030731
AI US 2001-975059 A1 20011011 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, GRANTED,
Pat. No. US 6506564 Continuation-in-part of Ser. No. US 1999-344667,
filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944 Continuation-in-part
of Ser. No. US 1999-240755, filed on 29 Jan 1999, ABANDONED
Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997,
PENDING

PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8062
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 44 USPATFULL on STN
AN 2003:180699 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2003124528 A1 20030703
AI US 2001-976601 A1 20011012 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606

CLMN Number of Claims: 431

ECL Exemplary Claim: 1

DRWN 46 Drawing Page(s)

LN.CNT 8060

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 44 USPATFULL on STN

AN 2003:127030 USPATFULL

TI Nanoparticles having oligonucleotides attached thereto and uses therefor

IN Mirkin, Chad A., Wilmette, IL, UNITED STATES

Letsinger, Robert L., Wilmette, IL, UNITED STATES

Taton, Thomas Andrew, Little Canada, MN, UNITED STATES

Lu, Gang, Mt Prospect, IL, UNITED STATES

PI US 2003087242 A1 20030508

AI US 2001-8978 A1 20011207 (10)

RLI Continuation-in-part of Ser. No. US 2001-927777, filed on 10 Aug 2001, PENDING Continuation-in-part of Ser. No. US 2001-820279, filed on 28 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-760500, filed on 12 Jan 2001, PENDING Continuation-in-part of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN

PRAI US 1996-31809P 19960729 (60)

US 2000-176409P 20000113 (60)

US 2000-192699P 20000328 (60)

US 2000-200161P 20000426 (60)

US 2000-213906P 20000626 (60)

US 2000-224631P 20000811 (60)

US 2000-254392P 20001208 (60)

US 2000-254418P 20001208 (60)

US 2000-255235P 20001211 (60)

US 2000-255236P 20001211 (60)

US 2001-282640P 20010409 (60)

DT Utility

FS APPLICATION

LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE 3200, CHICAGO, IL, 60606

CLMN Number of Claims: 626

ECL Exemplary Claim: 1

DRWN 71 Drawing Page(s)

LN.CNT 12308

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 44 USPATFULL on STN

AN 2003:106233 USPATFULL

TI Compositions and methods for the therapy and diagnosis of pancreatic cancer

IN Benson, Darin R., Seattle, WA, UNITED STATES

Kalos, Michael D., Seattle, WA, UNITED STATES

Lodes, Michael J., Seattle, WA, UNITED STATES

Persing, David H., Redmond, WA, UNITED STATES

Heppler, William T., Seattle, WA, UNITED STATES

Jiang, Yuqiu, Kent, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

PI US 2003073144 A1 20030417

AI US 2002-60036 A1 20020130 (10)

PRAI US 2001-333626P 20011127 (60)

US 2001-305484P 20010712 (60)

US 2001-265305P 20010130 (60)

US 2001-267568P 20010209 (60)

US 2001-313999P 20010820 (60)

US 2001-291631P 20010516 (60)

US 2001-287112P 20010428 (60)
 US 2001-278651P 20010321 (60)
 US 2001-265682P 20010131 (60)
 DT Utility
 FS APPLICATION
 LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
 SEATTLE, WA, 98104-7092
 CLMN Number of Claims: 17
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 14253
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 14 OF 44 USPATFULL on STN
 AN 2003:99517 USPATFULL
 TI Nanoparticles having oligonucleotides attached thereto and uses therefor
 IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
 Letsinger, Robert L., Wilmette, IL, UNITED STATES
 Mucic, Robert C., Glendale, CA, UNITED STATES
 Storhoff, James J., Evanston, IL, UNITED STATES
 Elghanian, Robert, Skokie, IL, UNITED STATES
 Taton, Thomas A., Little Canada, MN, UNITED STATES
 PA Nanosphere, Inc. (U.S. corporation)
 PI US 2003068622 A1 20030410
 AI US 2001-976863 A1 20011012 (9)
 RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
 Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
 GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
 1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
 Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
 PRAI US 1996-31809P 19960729 (60)
 US 2000-200161P 20000426 (60)
 DT Utility
 FS APPLICATION
 LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
 Wacker Drive, Chicago, IL, 60606
 CLMN Number of Claims: 431
 ECL Exemplary Claim: 1
 DRWN 46 Drawing Page(s)
 LN.CNT 8059
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 44 USPATFULL on STN
 AN 2003:86172 USPATFULL
 TI Nanoparticles having oligonucleotides attached thereto and uses therefor
 IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
 Letsinger, Robert L., Wilmette, IL, UNITED STATES
 Mucic, Robert C., Glendale, CA, UNITED STATES
 Storhoff, James J., Evanston, IL, UNITED STATES
 Elghanian, Robert, Skokie, IL, UNITED STATES
 Taton, Thomas A., Little Canada, MN, UNITED STATES
 PA Nanosphere, Inc. (U.S. corporation)
 PI US 2003059777 A1 20030327
 US 6645721 B2 20031111
 AI US 2001-957313 A1 20010920 (9)
 RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
 Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
 GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
 1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
 Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
 PRAI US 1996-31809P 19960729 (60)
 US 2000-200161P 20000426 (60)
 DT Utility
 FS APPLICATION

LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8060
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 44 USPATFULL on STN
AN 2003:78438 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2003054358 A1 20030320
AI US 2001-975376 A1 20011011 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 44 USPATFULL on STN
AN 2003:71346 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc.
PI US 2003049631 A1 20030313
US 6709825 B2 20040323
AI US 2001-974500 A1 20011010 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 172
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)

LN.CNT 6565

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 18 OF 44 USPATFULL on STN
AN 2003:71345 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2003049630 A1 20030313
US 6759199 B2 20040706
AI US 2001-957318 A1 20010920 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8041
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 19 OF 44 USPATFULL on STN
AN 2003:64684 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2003044805 A1 20030306
US 6777186 B2 20040817
AI US 2001-981344 A1 20011015 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 44 USPATFULL on STN

AN 2003:30222 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Park, So-Jung, Evanston, IL, UNITED STATES
PI US 2003022169 A1 20030130
US 6750016 B2 20040615
AI US 2001-820279 A1 20010328 (9)
RLI Continuation-in-part of Ser. No. US 2001-760500, filed on 12 Jan 2001,
PENDING Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun
1999, GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-176409P 20000113 (60)
US 2000-200161P 20000426 (60)
US 2000-192699P 20000328 (60)
US 2000-254392P 20001208 (60)
US 2000-255235P 20001211 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
3200, CHICAGO, IL, 60606
CLMN Number of Claims: 570
ECL Exemplary Claim: 1
DRWN 65 Drawing Page(s)
LN.CNT 11127
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 21 OF 44 USPATFULL on STN
AN 2003:13189 USPATFULL
TI **Nanoparticles** having **oligonucleotides** attached
thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, United States
Letsinger, Robert L., Wilmette, IL, United States
Mucic, Robert C., Glendale, CA, United States
Storhoff, James J., Evanston, IL, United States
Elghanian, Robert, Chicago, IL, United States
Taton, Thomas A., Chicago, IL, United States
PA Nanosphere, Inc., Northbrook, IL, United States (U.S. corporation)
PI US 6506564 B1 20030114
AI US 2000-603830 20000626 (9)
RLI Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999
Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999
Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997
PRAI US 2000-200161P 20000426 (60)
US 1996-31809P 19960729 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 84 Drawing Figure(s); 47 Drawing Page(s)
LN.CNT 5976
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 22 OF 44 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 3
AN 2003-328477 [31] WPIDS
CR 2004-031299 [03]; 2004-213934 [20]
DNN N2003-262701 DNC C2003-085380
TI Core/shell nanoparticle comprises inner metal-containing nanoparticle core
and outer non-alloying gold shell surrounding nanoparticle core.
DC B04 D16 P31 P53 S03

IN CAO, Y; JIN, R; MIRKIN, C A
PA (NOUN) UNIV NORTHWESTERN; (CAOY-I) CAO Y; (JINR-I) JIN R; (MIRK-I) MIRKIN
C A

CYC 101

PI US 2002177143 A1 20021128 (200331)* 18

WO 2002096262 A2 20021205 (200331) EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
ZW

WO 2003008539 A2 20030130 (200331) EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
ZW

EP 1392872 A2 20040303 (200417) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR

AU 2002239726 A1 20021209 (200452)

AU 2002341539 A1 20030303 (200452)

ADT US 2002177143 A1 Provisional US 2001-293861P 20010525, US 2001-34451
20011228; WO 2002096262 A2 WO 2001-US50825 20011228; WO 2003008539 A2 WO
2002-US16382 20020522; EP 1392872 A2 EP 2002-775688 20020522, WO
2002-US16382 20020522; AU 2002239726 A1 AU 2002-239726 20011228; AU
2002341539 A1 AU 2002-341539 20020522

FDT EP 1392872 A2 Based on WO 2003008539; AU 2002239726 A1 Based on WO
2002096262; AU 2002341539 A1 Based on WO 2003008539

PRAI US 2001-293861P 20010525; US 2001-34451 20011228

L5 ANSWER 23 OF 44 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN DUPLICATE 4

AN 2003-237646 [23] WPIDS

CR 1998-145263 [13]; 2001-061976 [07]; 2001-451868 [48]; 2001-656926 [75];
2002-258024 [30]; 2002-608256 [65]; 2003-092900 [08]; 2003-174167 [17];
2003-182627 [18]; 2003-198491 [19]; 2003-228114 [22]; 2003-228115 [22];
2003-247253 [24]; 2003-430409 [40]; 2003-479398 [45]; 2003-521746 [49];
2003-576420 [54]; 2003-596264 [56]; 2003-596265 [56]; 2003-615795 [58];
2003-634854 [60]; 2003-810979 [76]; 2003-863931 [80]; 2003-897536 [82];
2004-059018 [06]; 2004-059019 [06]; 2004-059020 [06]; 2004-059754 [06];
2004-440357 [41]

DNC C2003-060831

TI Detecting a nucleic acid using **oligonucleotides** attached to
nanoparticles, where each **oligonucleotide** has a sequence
complementary to at least two portions of the nucleic acid being detected,
useful in diagnosis of a diseases (e.g. HIV).

DC B04 D16

IN ELGHANIAN, R; LETSINGER, R L; MIRKIN, C A; MUCIC, R C; STORHOFF, J J

PA (NANO-N) NANOSPHERE INC

CYC 1

PI US 6495324 B1 20021217 (200323)* 78

ADT US 6495324 B1 Provisional US 1996-31809P 19960729, CIP of WO 1997-US12783
19970721, CIP of US 1999-240755 19990129, Div ex US 1999-344667 19990625,
US 2000-693005 20001020

PRAI US 1996-31809P 19960729; WO 1997-US12783 19970721;
US 1999-240755 19990129; US 1999-344667 19990625;
US 2000-693005 20001020

L5 ANSWER 24 OF 44 USPATFULL on STN

AN 2002:337329 USPATFULL

TI Bio-barcodes based on **oligonucleotide-modified nanoparticles**
IN Mirkin, Chad A., Willmette, IL, UNITED STATES
Park, So-Jung, Evanston, IL, UNITED STATES
Nam, Jwa-Min, Evanston, IL, UNITED STATES
PI US 2002192687 A1 20021219
AI US 2002-108211 A1 20020327 (10)
RLI Continuation-in-part of Ser. No. US 2001-820279, filed on 28 Mar 2001,
PENDING
PRAI WO 2001-US10071 20010328
US 2000-192699P 20000328 (60)
US 2001-350560P 20011113 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
3200, CHICAGO, IL, 60606
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 2185
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 25 OF 44 USPATFULL on STN
AN 2002:322449 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002182613 A1 20021205
US 6682895 B2 20040127
AI US 2001-976971 A1 20011012 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 172
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 6563
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 26 OF 44 USPATFULL on STN
AN 2002:322447 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002182611 A1 20021205
US 6610491 B2 20030826

AI US 2001-966491 A1 20010928 (9)
 RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
 Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
 GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
 1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
 Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
 PRAI US 1996-31809P 19960729 (60)
 US 2000-200161P 20000426 (60)
 DT Utility
 FS APPLICATION
 LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
 3200, CHICAGO, IL, 60606
 CLMN Number of Claims: 190
 ECL Exemplary Claim: 1
 DRWN 46 Drawing Page(s)
 LN.CNT 6646
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 27 OF 44 USPATFULL on STN
 AN 2002:307830 USPATFULL
 TI Movement of biomolecule-coated nanoparticles in an electric field
 IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
 Letsinger, Robert L., Wilmette, IL, UNITED STATES
 Mucic, Robert C., Glendale, CA, UNITED STATES
 Storhoff, James J., Evanston, IL, UNITED STATES
 Elghanian, Robert, Chicago, IL, UNITED STATES
 Taton, Thomas Andrew, Chicago, IL, UNITED STATES
 Garimella, Viswanadham, Evanston, IL, UNITED STATES
 Li, Zhi, Evanston, IL, UNITED STATES
 Park, So-Jung, Evanston, IL, UNITED STATES
 PI US 2002172953 A1 20021121
 AI US 2001-927777 A1 20010810 (9)
 RLI Continuation-in-part of Ser. No. US 2001-820279, filed on 28 Mar 2001,
 PENDING Continuation-in-part of Ser. No. US 2001-760500, filed on 12 Jan
 2001, PENDING Continuation-in-part of Ser. No. US 2000-603830, filed on
 26 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-344667,
 filed on 25 Jun 1999, GRANTED, Pat. No. US 6361944 Continuation-in-part
 of Ser. No. US 1999-240755, filed on 29 Jan 1999, ABANDONED
 Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997,
 UNKNOWN
 PRAI US 1996-31809P 19960729 (60)
 US 2000-176409P 20000113 (60)
 US 2000-200161P 20000426 (60)
 US 2000-192699P 20000328 (60)
 US 2000-254392P 20001208 (60)
 US 2000-255235P 20001211 (60)
 US 2000-224631P 20000811 (60)
 DT Utility
 FS APPLICATION
 LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
 Wacker Drive, Chicago, IL, 60606
 CLMN Number of Claims: 598
 ECL Exemplary Claim: 1
 DRWN 64 Drawing Page(s)
 LN.CNT 11435
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 28 OF 44 USPATFULL on STN
 AN 2002:294562 USPATFULL
 TI Nanoparticles having oligonucleotides attached thereto and uses therefor
 IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
 Letsinger, Robert L., Wilmette, IL, UNITED STATES
 Mucic, Robert C., Glendale, CA, UNITED STATES
 Storhoff, James J., Evanston, IL, UNITED STATES

Elghanian, Robert, Chicago, IL, UNITED STATES
Taton, Thomas A., Chicago, IL, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002164605 A1 20021107
US 6673548 B2 20040106
AI US 2001-966312 A1 20010928 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
3200, CHICAGO, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8066
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 44 USPATFULL on STN
AN 2002:287518 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas Andrew, Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002160381 A1 20021031
AI US 2001-975498 A1 20011011 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
PENDING Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan
1999, ABANDONED Continuation-in-part of Ser. No. WO 1997-US12783, filed
on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 5695
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 30 OF 44 USPATFULL on STN
AN 2002:280028 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas Andrew, Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002155462 A1 20021024
US 6720147 B2 20040413

AI US 2001-976577 A1 20011012 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8047
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 44 USPATFULL on STN
AN 2002:280027 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas Andrew, Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002155461 A1 20021024
AI US 2001-976378 A1 20011012 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8052
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 44 USPATFULL on STN
AN 2002:280025 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002155459 A1 20021024
US 6677122 B2 20040113
AI US 2001-975062 A1 20011011 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of

Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN

PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)

DT Utility
FS APPLICATION

LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606

CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 44 USPATFULL on STN

AN 2002:280024 USPATFULL

TI Nanoparticles having oligonucleotides attached thereto and uses therefor

IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES

PA Nanosphere, Inc. (U.S. corporation)

PI US 2002155458 A1 20021024
US 6740491 B2 20040525

AI US 2001-967409 A1 20010928 (9)

RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN

PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)

DT Utility
FS APPLICATION

LREP MCDONNELL BOEHNNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
3200, CHICAGO, IL, 60606

CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 34 OF 44 USPATFULL on STN

AN 2002:280008 USPATFULL

TI Nanoparticles having oligonucleotides attached thereto and uses therefor

IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Chicago, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
Garimella, Viswanadham, Evanston, IL, UNITED STATES
Li, Zhi, Evanston, IL, UNITED STATES

PI US 2002155442 A1 20021024
US 6767702 B2 20040727

AI US 2001-760500 A1 20010112 (9)

RLI Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN

PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
US 2000-176409P 20000113 (60)

US 2000-213906P 20000626 (60)
 DT Utility
 FS APPLICATION
 LREP MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
 3200, CHICAGO, IL, 60606
 CLMN Number of Claims: 485
 ECL Exemplary Claim: 1
 DRWN 51 Drawing Page(s)
 LN.CNT 8754
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 35 OF 44 USPATFULL on STN
 AN 2002:272801 USPATFULL
 TI Compositions and methods for the therapy and diagnosis of colon cancer
 IN Stolk, John A., Bothell, WA, UNITED STATES
 Xu, Jiangchun, Bellevue, WA, UNITED STATES
 Chenault, Ruth A., Seattle, WA, UNITED STATES
 Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
 PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
 PI US 2002150922 A1 20021017
 AI US 2001-998598 A1 20011116 (9)
 PRAI US 2001-304037P 20010710 (60)
 US 2001-279670P 20010328 (60)
 US 2001-267011P 20010206 (60)
 US 2000-252222P 20001120 (60)
 DT Utility
 FS APPLICATION
 LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
 SEATTLE, WA, 98104-7092
 CLMN Number of Claims: 17
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 9233
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 36 OF 44 USPATFULL on STN
 AN 2002:265844 USPATFULL
 TI Nanoparticles having oligonucleotides attached thereto and uses therefor
 IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
 Letsinger, Robert L., Wilmette, IL, UNITED STATES
 Mucic, Robert C., Glendale, CA, UNITED STATES
 Storhoff, James J., Evanston, IL, UNITED STATES
 Elghanian, Robert, Skokie, IL, UNITED STATES
 Taton, Thomas A., Little Canada, MN, UNITED STATES
 PA Nanosphere, Inc. (U.S. corporation)
 PI US 2002146720 A1 20021010
 US 6582921 B2 20030624
 AI US 2001-961949 A1 20010920 (9)
 RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
 Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
 GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
 1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
 Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
 PRAI US 1996-31809P 19960729 (60)
 US 2000-200161P 20000426 (60)
 DT Utility
 FS APPLICATION
 LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
 Wacker Drive, Chicago, IL, 60606
 CLMN Number of Claims: 431
 ECL Exemplary Claim: 1
 DRWN 46 Drawing Page(s)
 LN.CNT 8063
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 37 OF 44 USPATFULL on STN
AN 2002:251128 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002137072 A1 20020926
US 6730269 B2 20040504
AI US 2001-976617 A1 20011012 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 38 OF 44 USPATFULL on STN
AN 2002:251127 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002137071 A1 20020926
AI US 2001-974007 A1 20011010 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8063
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 39 OF 44 USPATFULL on STN
AN 2002:251126 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES

Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES

PA Nanosphere, Inc. (U.S. corporation)
PI US 2002137070 A1 20020926
AI US 2001-973638 A1 20011010 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8060
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 40 OF 44 USPATFULL on STN
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 41 OF 44 USPATFULL on STN
AN 2002:242791 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)
PI US 2002131971 A1 20020919
AI US 2001-33528 A1 20011226 (10)
RLI Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001,
PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092

CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 42 OF 44 USPATFULL on STN
AN 2002:235385 USPATFULL
TI Nanoparticles having oligonucleotides attached thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, UNITED STATES
Letsinger, Robert L., Wilmette, IL, UNITED STATES
Mucic, Robert C., Glendale, CA, UNITED STATES
Storhoff, James J., Evanston, IL, UNITED STATES
Elghanian, Robert, Skokie, IL, UNITED STATES
Taton, Thomas A., Little Canada, MN, UNITED STATES
PA Nanosphere, Inc. (U.S. corporation)
PI US 2002127574 A1 20020912
US 6720411 B2 20040413
AI US 2001-973788 A1 20011010 (9)
RLI Continuation of Ser. No. US 2000-603830, filed on 26 Jun 2000, PENDING
Continuation-in-part of Ser. No. US 1999-344667, filed on 25 Jun 1999,
GRANTED, Pat. No. US 6361944 Continuation-in-part of Ser. No. US
1999-240755, filed on 29 Jan 1999, ABANDONED Continuation-in-part of
Ser. No. WO 1997-US12783, filed on 21 Jul 1997, UNKNOWN
PRAI US 1996-31809P 19960729 (60)
US 2000-200161P 20000426 (60)
DT Utility
FS APPLICATION
LREP Emily Miao, McDonnell Boehnen Hulbert & Berghoff, 32nd Floor, 300 S.
Wacker Drive, Chicago, IL, 60606
CLMN Number of Claims: 431
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 8060
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 43 OF 44 USPATFULL on STN
AN 2002:168347 USPATFULL
TI **Nanoparticles** having oligonucleotides attached
thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, United States
Letsinger, Robert L., Wilmette, IL, United States
Mucic, Robert C., Glendale, CA, United States
Storhoff, James J., Evanston, IL, United States
Elghanian, Robert, Chicago, IL, United States
PA Nanosphere, Inc., Northbrook, IL, United States (U.S. corporation)
PI US 6417340 B1 20020709
AI US 2000-693352 20001020 (9)
RLI Division of Ser. No. US 1999-344667, filed on 25 Jun 1999
Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999,
now abandoned Continuation-in-part of Ser. No. WO 1997-US12783, filed on
21 Jul 1997
PRAI US 1996-31809P 19960729 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 58 Drawing Figure(s); 34 Drawing Page(s)
LN.CNT 4214
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 44 OF 44 USPATFULL on STN

AN 2002:63683 USPATFULL
TI **Nanoparticles** having **oligonucleotides** attached
thereto and uses therefor
IN Mirkin, Chad A., Wilmette, IL, United States
Letsinger, Robert L., Wilmette, IL, United States
Mucic, Robert C., Glendale, CA, United States
Storhoff, James J., Evanston, IL, United States
Elghanian, Robert, Chicago, IL, United States
PA Nanosphere, Inc., Northbrook, IL, United States (U.S. corporation)
PI US 6361944 B1 20020326
AI US 1999-344667 19990625 (9)
RLI Continuation-in-part of Ser. No. US 1999-240755, filed on 29 Jan 1999
Continuation-in-part of Ser. No. WO 1997-US12783, filed on 21 Jul 1997
PRAI US 1996-31809P 19960729 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 58 Drawing Figure(s); 34 Drawing Page(s)
LN.CNT 4158
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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